# Author Index


Boscher, D., 67
Bouillie, R., 213
Cherin, A. H., 49
Danielson, B. L., 373
Franzen, D. L., 373
Gallawa, R. L., 373
Gardner, W. B., 49
Georg, Otfried, 169
Head, E. D., 49
Hodara, Henri, 233
Imoto, Katsuyuki, 191
Ishida, Koji, 191
Ishizuka, S., 1
Killat, U., 159
Kim, E. M., 373
Le Noane, G., 67
Lovelace, C. R., 49
Mahlein, H. F., 339
Merz, James L., 143
Moalic, J., 213
Nakagawa, Jyunkichi, 191
Nakahara, M., 427
Neumann, Ernest-George, 203
Nicolaisen, E., 129
Nonclercq, N., 67
Oestreich, U. H. P., 95
Olesen, H., 129
Pearsall, Thomas P., 107
Rabe, G., 159
Rave, W., 159
Schmidt, K. H., 225
Seinecke, S., 225
Serizawa, H., 1
Severin, P. J., 23
Shigesawa, Hiroshi, 9
Spano, Paolo, 403
Suda, H., 427
Sudo, S., 427
Suganuma, Tsuneo, 191
Takiyama, Kei, 9
Tanaka, T., 1
Tsujimoto, Y., 1
Young, M., 373
Zaganiaris, A., 67

# Article Index

Baseband Transfer Function of Multimode Optical Fibers, An Estimation of the, 9
Concentric-Core Fiber, Characterization of a, 373
Fiber Optic Aerial Cables, 95
Fiber-Optic Communication in the Wavelength-Division Multiplex Mode, 339
Fiberoptic Receivers Performance: A Tutorial Review, 233
Focused Gaussian Beams, Mode Excitation in Circularly Symmetric Graded-Index Optical Fibers by, 169
Graded-Index Compound-Glass Fibers, Loss Measurements in, 23
Long Wavelength Photodectors, 107
Low Loss Dielectic Optical Waveguide Bends, 203
Mandrel Wrap Mode Filters for Optical Fiber Loss Measurements, Selection of, 49
Optical Fiber Cables Using V-Grooved Cylindrical Units: High Performance Cables, 67
Optical Transmission System Using 1 X 6 Optical Switch, New Form of, 1
Parallel Data Transmission Using Monolithic ICs, A Miniaturized 10 Mbit/s Fiber Optic Computer Interface for, 225
Semiconductor Laser and Its Consequence for Dispersion Measurements and Interference Noise in Optical Fibers, Linear Wavelength Sweep of a, 129
Semiconductor Lasers, Instabilities in, 403
Star Couplers With High Splitting Ratio, Binary Phase Gratings for, 159
Tuileries-Philippe Auguste: The First Fully Engineered High Capacity Junction Line in Paris, 213
Use of III-V Compounds for Integrated Optical Circuits, The, 143
VAD Process, Fine Glass Particle-Deposition Mechanism in the, 427
VAD Fibers Using a Multiple Burner with Single Source Gas Nozzle, Transmission Characteristics of, 191

# Contents

A New Form of Optical Transmission Using 1 × 6 Optical Switch
T. Tanaka, S. Ishizuka, H. Serizawa, and Y. Tsujimoto ..... 1

An Estimation of the Baseband Transfer Function of Multimode Optical Fibers
Hiroshi Shigesawa and Kei Takiyama ..... 9

Loss Measurements in Graded-Index Compound-Glass Fibers
P. J. Severin ..... 23

Selection of Mandrel Wrap Mode Filters for Optical Fiber Loss Measurements
A. H. Cherin, E. D. Head, C. R. Lovelace, and W. B. Gardner ..... 49

Optical Fiber Cables Using V-Grooved Cylindrical Units: High Performance Cables
D. Boscher, G. Le Noane, N. Nonclercq, and A. Zaganiaris.. 67

Fiber Optic Aerial Cables
U. H. P. Oestreich ..... 95

Long Wavelength Photodetectors
Thomas P. Pearsall ..... 107

Linear Wavelength Sweep of a Semiconductor Laser and Its Consequence for Dispersion Measurements and Interference Noise in Optical Fibers
H. Olesen and E. Nicolaisen..... 129

The Use of III-V Compounds for Integrated Optical Circuits
James L. Merz ..... 143

Binary Phase Gratings for Star Couplers with High Splitting Ratio
U. Killat, G. Rabe, and W. Rave ..... 159

Mode Excitation in Circularly Symmetric Graded-Index Optical Fibers by Focused Gaussian Beams
Otfried Georg ..... 169

Transmission Characteristics of VAD Fibers Using a Multiple Burner with Single Source Gas Nozzle
Koji Ishida, Katsuyuki Imoto, Tsuneo Suganuma, and Jyunkichi Nakagawa ..... 191

Low Loss Dielectic Optical Waveguide Bends
Ernst-Georg Neumann ..... 203

Tuileries-Philippe Auguste: The First Fully Engineered High Capacity Junction Line in Paris
R. Bouillie and J. Moalic ..... 213

A Miniaturized 10 Mbit/s Fiber Optic Computer Interface for Parallel Data Transmission Using Monolithic ICs
K. H. Schmidt and S. Seinecke ..... 225

Fiberoptic Receivers Performance: A Tutorial View
Henri Hodara ..... 233

Fiber-Optic Communication in the Wavelength-Division Multiplex Mode
H. F. Mahlein ..... 339

Characterization of a Concentric-Core Fiber
B. L. Danielson, D. L. Franzen, R. L. Gallawa, E. M. Kim, and M. Young ..... 373

Instabilities in Semiconductor Lasers
Paolo Spano ..... 403

Fine Glass Particle-Deposition Mechanism in the VAD Process
H. Suda, S. Sudo, and M. Nakahara ..... 427